

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
14 April 2005 (14.04.2005)

PCT

(10) International Publication Number  
**WO 2005/032495 A3**

(51) International Patent Classification:  
*C12Q 1/68* (2006.01) *C07H 21/04* (2006.01)

MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(21) International Application Number:  
PCT/US2004/034163

(22) International Filing Date: 1 October 2004 (01.10.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/508,355 3 October 2003 (03.10.2003) US

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Declarations under Rule 4.17:**

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))
- of inventorship (Rule 4.17(iv))

**Published:**

- with international search report
- with sequence listing part of description published separately in electronic form and available upon request from the International Bureau

(71) Applicant (*for all designated States except US*): **BAYER PHARMACEUTICALS CORPORATION** [US/US]; 400 Morgan Lane, West Haven, Connecticut 06516 (US).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **TAYLOR, Ian** [US/US]; 149 Country Way, Madison, Connecticut 06443 (US). **PAULOSKI, Nicole, R.** [US/US]; 14 Aceto Street, Branford, Connecticut 06405 (US). **BIGWOOD, Douglas** [US/US]; 72 Kelsey Springs Drive, Madison, Connecticut 06443 (US).

(74) Agents: **GREENMAN, Jeffrey, M.** et al.; Bayer Pharmaceuticals Corporation, 400 Morgan Lane, West Haven, Connecticut 06516 (US).

(88) Date of publication of the international search report:  
1 June 2006

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,

(15) Information about Correction:

**Previous Correction:**

see PCT Gazette No. 24/2005 of 16 June 2005

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: GENE EXPRESSION PROFILES AND METHODS OF USE

(57) Abstract: The present invention relates to gene expression profiles for lung cancer, microarrays comprising nucleic acid sequences representing gene expression profiles, and methods of using expression profiles and microarrays. The invention also provides methods and compositions for diagnostic assays for detecting cancer and therapeutic methods and compositions for treating cancer. The invention also provides methods for designing, identifying, and optimizing therapeutics for cancer.

WO 2005/032495 A3